

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning on page 4, line 26 and continuing onto page 5 of the specification with the following amended paragraph:

Figure 2 shows the tip region 130 of the radiation applicator of figure 1 in more detail. The tip region, generally indicated 200, shows the distal end of the coaxial cable which comprises an outer conductor 210 spaced from a core conductor 220. The space between the conductors 210 and 220 is filled with a dielectric material 230. The antenna 240 for emitting radiation conducted by the cable comprises a length ~~240~~ of the core conductor of the coaxial cable extending beyond the outer conductor 210 at the distal end of the coaxial cable. To enhance the radiating qualities of the antenna 240, it is preferred that the length of the core conductor providing the antenna is about one half of a wavelength of the radiation in the dielectric. The antenna 240 is enveloped by dielectric body 250 in which the wavelength of the employed radiation is reduced below its free-space value hence enabling the exposed length ~~240~~ of the core conductor providing the antenna 240 to be shorter than might otherwise be possible. In order to enhance radiation from the antenna 240 in the forward direction, the dielectric body 250, in addition to comprising a cylindrical portion 260 which envelops the ~~exposed length of core conductor antenna~~ antenna 240, comprises a hemispherical section 270 which supports partial internal reflection of the radiation from the antenna in the forward direction as indicated by arrows 280 and 290. Preferably, the hemispherical section 270 is dimensioned so as to provide a resonator which further enhances radiation from the dielectric body ~~in~~ 250 in the forward direction. Resonance of radiation partially reflected within the dielectric body 250 can be encouraged by, for example, dimensioning the hemispherical section 270 to have a radius approximately equal to one half of a wavelength of the radiation employed. It will be appreciated that the dielectric body can have other dimensions and shapes provided that they encourage forward ~~propagation~~ propagation of the radiation by means of internal reflection and/or resonance.